



“Working within CITES for the protection and conservation of species in international trade”

Leopard *Panthera pardus*

CoP14 Prop. 3 (Uganda) Transfer from Appendix I to Appendix II, Uganda population, with an annotation: “1) for the exclusive purpose of sport hunting for trophies and skins for personal use, to be exported as personal effects; and 2) with an annual export quota of 50 leopards for the whole country”

Document 37.1 (Mozambique) Proposal to increase leopard export quota for Mozambique from 60 to 120.

SSN VIEW: **OPPOSE Adoption of Prop. 3, including establishment of a leopard export quota.**
OPPOSE Increase in Export Quota for Mozambique in Doc. 37.1.

BACKGROUND: The leopard, *Panthera pardus*, is on CITES Appendix I. The species, found in Asia and Africa, inhabits 31 sub-Saharan range States. Resolution Conf. 9.21 (Rev. CoP13) states that whenever the CoP has set an export quota for a species listed on Appendix I, this satisfies the requirements of Article III regarding the finding that the export and the import will not be detrimental to the survival of the species, provided that the quota is not exceeded. **In accordance with Resolution Conf. 9.21 (Rev. CoP13) proposals for quotas must provide “supporting information including details of the scientific basis for the proposed quota”.** Resolution Conf. 10.14 (Rev. CoP13): establishes annual export quotas for leopard skin hunting trophies and for personal use for eleven range States, recommends that importing Parties approve permits if the skins are from States with quotas, creates a skin tagging system, and provides that increased or new quotas must be approved by the CoP in accordance with Resolution Conf. 9.21 (Rev. CoP13). Annually, up to 2560 leopard skins and trophies may be exported under quotas (see box).

Leopard Export Quotas (Resolution Conf. 10.14 (RevCoP13))	
Botswana	130
Central African Republic	40
Ethiopia	500
Kenya	80
Malawi	50
Mozambique	60
Namibia	250
South Africa	150
Tanzania	500
Zambia	300
Zimbabwe	500

LEOPARDS ARE DECREASING IN NUMBER: According to the IUCN Red List of Threatened Species (IUCN/SSC Cat Specialist Group, 2002), “based on estimates of density and geographic range (Nowell and Jackson, 1996), the leopard’s total effective population size is estimated at greater than 50,000 mature breeding individuals, but with a **declining trend** due to persecution and degradation of its habitat and prey base.”

THE SIZE OF THE SUB-SAHARAN LEOPARD POPULATION IS UNKNOWN. Both Proposal 14.2 and Document 37.1 refer to a model for estimating leopard populations in sub-Saharan Africa, based on habitat availability and rainfall, developed by Martin and de Meulenaer (1988). However, **the Martin and de Meulenaer (1988) model has been discredited as a scientific basis for estimating leopard populations and should not be utilized to set annual export quotas.**

The model provides an indirect estimate of 714,000 leopards, but this is “generally considered to be an overestimate” (Nowell and Jackson, 1996). According to Nowell and Jackson (1996), the model has been criticized for “failure to account adequately for persecution and reduction of wild prey as factors lowering leopard density” and the questionable “universality of the correlation of leopard density and rainfall.... a variable representing prey density should be incorporated into the regression linking leopard density to rainfall”, and “while the link between herbivore density and rainfall may be generally valid, a herbivore biomass increase does not necessarily equate to increased leopard prey biomass. The herbivore biomass could be in the form of very large species (elephant, buffalo, hippopotamus) or herd-forming species

(elephant, buffalo, hippopotamus) or herd-forming species (zebra and wildebeest), which provide little food for leopards.” Nowell and Jackson (1996) also provide information on how the model grossly overestimates the actual numbers of leopards determined by field studies:

“The rainfall/density regression used by Martin and de Meulenaer (1988) suggest that Zaire would hold some 33% of sub-Saharan African leopards, a figure resulting from presumed very high densities in tropical rain forest (up to 40 leopards, including young and transients, per 100 km²). However, Baily (1993) is among several authorities who have argued that since terrestrial mammalian prey biomass is lower in rain forest than in savannah environments, as the bulk of productivity is locked up in the tree canopy, therefore leopard density should be correspondingly lower... D. Jenny (in litt. 1994) provides a preliminary estimate of five adult leopards in his 80 km² study area in Tai NP, or 6.25 leopards per 100 km². J. Hart (in litt. 1994) offers a preliminary estimate of one adult leopard per 8-12 km² in Zaire’s Ituri forest, or 8.3-12.5 leopards per 100 km². These estimates are considerably lower than the 40 leopards per 100 km² suggested by Martin and de Meulenaer’s rainfall/density regression.”

Regarding the Martin and de Meulenaer (1988) model, Norton (1990) warned, *“Results of ecological studies on leopards in the Cape Province, South Africa, carried out by the Chief Directorate: Nature and Environmental Conservation, suggest that some of the assumptions on which the population estimates are based are highly suspect, and that the population figures may be unrealistically high. The recommendations for leopard conservation and management should therefore be viewed with caution, especially hunting quotas based on a proportional offtake from the “estimated total” population.”*

UGANDA: PROP. 3 DOES NOT CONFORM TO THE FORMAT OF RESOLUTION CONF. 9.24 (Rev. CoP13). Proposal 3 is a proposal to amend the Appendices but does not conform to the proposal format given in Resolution Conf. 9.24 (Rev. CoP13), Annex 6 (Format for proposals to amend the Appendices). Consequently, the proposal does not contain information (such as habitat trends, population size, population trends, geographic trends) necessary to evaluate whether criteria for transferring the Uganda population of leopard from Appendix I to Appendix II are satisfied. Also, in accordance with Resolution Conf. 9.24 (Rev. CoP12), split-listing of a species should be avoided in view of the enforcement problems it creates.

UGANDA: THERE IS NO SCIENTIFIC BASIS FOR THE PROPOSED EXPORT QUOTA. It has been suggested that Proposal 3 may be considered a proposal to establish an annual export quota for 50 leopards for Uganda under Resolutions Conf. 9.21 (Rev. CoP13) and 10.24 (Rev. CoP13). However, under Resolution Conf. 9.21 (Rev. CoP13), establishment of export quotas requires the proponent to provide the scientific basis for the proposed quota to the CoP. **Proposal 3 does not provide any information whatsoever on the scientific basis for the proposed annual export quota.** The proposal provides no scientific information on leopard population sizes or trends in Uganda, nor information on monitoring or management of leopard populations in the country.

MOZAMBIQUE: THERE IS NO SCIENTIFIC BASIS FOR THE PROPOSED DOUBLING OF THE EXPORT QUOTA. In Document 37.1 Mozambique proposes to double its leopard annual export quota from 60 to 120. Under Resolution Conf. 9.21 (Rev. CoP13), Mozambique must provide the CoP with the scientific basis for the proposed increase in the quota. Document 37.1 states that *“little research has been conducted into the status, distribution or ecology of the leopard in Mozambique” and that there are “no detailed field studies”*. In order to estimate population size, Document 37.1 applies the discredited Martin and de Meulenaer (1988) model to Mozambique, using conservative estimates of the percent of the country containing suitable leopard habitat and the average annual rainfall, and concludes that *“it is probable that the leopard population of Mozambique exceeds 20,000.”* The Document further states that, based on a questionable conclusion of Martin and de Meulenaer (1988) that a potential sustainable harvest is 5% of the population outside protected areas, a population of this size could support an annual harvest of around 1,000. The Document further estimates populations of leopards in areas where hunting occurs based solely on the availability of leopard habitat. The Martin and de Meulenaer (1988) model **does not provide a sound scientific basis for the doubling of Mozambique’s annual leopard export quota.** Document 37.1 also does not provide information on leopard population trends, or the effect of the existing export quota on leopard populations.

MOZAMBIQUE EXCEEDED ITS EXPORT QUOTA IN 2005. Document 37.1 states that in 2000-2005, Mozambique exported (respectively) 45, 24, 21, 27, 46, and 57 leopards. However, according to reports by importing countries contained in the UNEP/WCMC CITES Trade Database (2007), Mozambique exported the following number of trophies in those same years: 35, 27, 19, 27, 54 and 80. Given that the actual number of leopards exported in 2001, 2004 and 2005 exceeded the number recorded by Mozambique in Document 37.1, **this calls into question the ability of Mozambique to manage its export quotas.** It should also be noted that, according to the data in the UNEP/WCMC CITES Trade Database, Mozambique exceeded its leopard export quota in 2005 by exporting 80 leopard trophies when the quota agreed by the CITES Parties is 60.

THE CoP SHOULD DEMAND SCIENTIFIC RIGOR WHEN CONSIDERING ESTABLISHMENT OF EXPORT QUOTAS. There has been an unwelcome tendency for the CoP to approve proposals to establish or increase annual export quotas for CITES Appendix I species without the necessary scientific basis being provided. For example, at CoP13, Parties approved a proposal by South Africa to double its annual leopard export quota from 75 to 150. A few months after the CoP, the South African government put the increase on hold because the proposal requesting the increase was based on faulty information. SSN urges the CoP to demand scientific rigor when considering the establishment of annual export quotas.

REFERENCES CITED: IUCN/SSC Cat Specialist Group, 2002. *Panthera pardus*. In: IUCN 2006. 2006 IUCN Red List of Threatened Species. <www.iucnredlist.org>. Downloaded on 06 May 2007. **Martin, R. and T. de Meulenaer, 1988.** *Survey of the status of the leopard (Panthera pardus) in sub-Saharan Africa*. CITES, Switzerland. **Norton, P. 1990.** *How many leopards? A criticism of Martin and de Meulenaer's population estimates for Africa*. S. AFR J. SCI./S.-AFR. TYDSKR. WET. Vol. 86, no. 5-6, pp. 218-219. **Nowell, K. and P. Jackson (compilers and editors), 1996.** *Wild Cats: Status Survey and Conservation Action Plan*. IUCN/SSC Cat Specialist Group, IUCN, Gland, Switzerland. **UNEP-WCMC, 2007.** *CITES Trade Database*. Downloaded on 07 February 2007.